

April 5, 2001

Mr. Roy Richards
Detrex Corporation
2263 Distributors Drive
Indianapolis, Indiana 46241

**Re: First Administrative Amendment 097-14202-00373
to Construction Permit # CP 097-11791-00373**

Dear Mr. Richards:

Detrex Corporation was issued a Construction Permit on June 16, 2000 for construction and operation of the Detrex Corporation parts cleaning system, located at 2263 Distributors Drive, Indianapolis, Indiana. The construction of the permitted equipment has not been finished as of this date.

On March 22, 2001 Detrex Corporation requested a change to the Construction Permit to be approved consisting of equipment design and Cross Rod Batch Vapor Degreaser, Emission Unit #113, control option change in accordance with the NESHAP 40 CFR 63.463(b)(2)(i).

Originally, option 7 [40 CFR 63.463(b)(2)(i), table 2-2] was selected, including Freeboard refrigeration device, Superheated vapor, and Carbon adsorber. The source requested this option to be changed to option 4: Freeboard ratio of 1.0, Reduced room draft, and Superheated vapor. A carbon adsorber, Emission Unit #115, will also be used as additional control.

Pursuant to 326 IAC 2-1.1-1(Definitions) and 326 IAC 2-6.1-6 (Permit Revisions), these changes are a "Minor physical change", consisting of the "replacement or addition of air pollution control devices", incorporating the same NESHAP 40 CFR 63 as in the original Construction Permit.

The Construction Permit 097-11791-00373 is hereby administratively amended as follows:

1. A change to the facility description located on page 3 of 27 of the permit.

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) cross rod batch vapor Degreaser (model 2DCR-550-1S-SPCC), Emission Unit #113, using superheated vapor, with air solvent interface 96 square feet, maximum capacity 7,000 pounds per hour, Stack ID S/V-1. Emissions will be controlled by a **freeboard ratio of 1.0, a reduced room draft, and superheated vapor. A carbon adsorber, Emission Unit #115, Stack ID S/V-3, will also be added as additional control.** ~~, freeboard refrigeration device and Carbon Adsorber, Emission Unit #115, Stack ID S/V-3.~~

2. The same change to the corresponding facility description of Section D on page 17 of 27.

SECTION D

EMISSIONS UNIT OPERATION CONDITIONS

(Continued on page 2)

One (1) cross rod batch vapor Degreaser (model 2DCR-550-1S-SPCC), Emission Unit #113, using superheated vapor, with air solvent interface 96 square feet, maximum capacity 7,000 pounds per hour, Stack ID S/V-1. Emissions will be controlled by a **freeboard ratio of 1.0, a reduced room draft, and superheated vapor. A carbon adsorber, Emission Unit #115, Stack ID S/V-3, will also be added as additional control.** ~~, freeboard refrigeration device and Carbon Adsorber, Emission Unit #115, Stack ID S/V-3.~~

The following changes were made in Emission Limitations and Standards conditions, incorporating the equipment design and control option changes (Construction Permit pages 17-26):

Emission Limitations and Standards

D.1 Halogenated Solvent Cleaning Machine NESHAP [40 CFR Part 63, Subpart T], [326 IAC 20-6-1]

This facility is subject to 40 CFR Part 63, Subpart T, (Halogenated Solvent Cleaning Machine NESHAP), which is incorporated by reference as 326 IAC 20-6-1.

(a) That pursuant to 40 CFR 63.463(a) & (b), the Permittee shall conform to the following design requirements:

~~(1) An idling and downtime mode cover, as described in 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the Degreaser openings when in place, and is free of cracks, holes, and other defects.~~

~~(1)(2)~~ The Degreaser shall have a freeboard ratio of **one (1.0)** ~~0.75 or greater~~.

~~(2)(3)~~ The Degreaser shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.

~~(3)(4)~~ The Degreaser shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

~~(4)(5)~~ The Degreaser shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the Degreaser rises above the height of the primary condenser.

~~(5)(6)~~ The Degreaser shall have a primary condenser.

~~(6)(7)~~ The Degreaser shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63.463(e)(2)(vii).

~~(8) Cover to the Degreaser shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the Degreaser or maintenance or monitoring is being performed that requires the cover to not be in place.~~

~~(7)(9)~~ The parts baskets or the parts being cleaned in the Degreaser shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.

- (b) That, pursuant to 40 CFR 63.463 (d), the following work and operational practice requirements for the degreasing operations are applicable:
- (1) Any spraying operations shall be done within the vapor zone or within a section of the Degreaser that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - (2) Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from the Degreaser unless an equally effective approach has been approved by the ERMD.
 - (3) Parts baskets or parts shall not be removed from the Degreaser until dripping has stopped.
 - (2) During startup of the Degreaser, the primary condenser shall be turned on before the sump heater.
 - (3) During shutdown of the Degreaser, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
 - (4) When solvent is added or drained from the Degreaser, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - (5) The Degreaser and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the ERMD's satisfaction to achieve the same or better results as those recommended by the manufacturer.
 - (6) Each operator of the Degreaser shall receive training and will pass a solvent cleaning procedures test in accordance with 40 CFR 63.463(d)(10).
 - (7) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
 - (8) Sponges, fabric, wood, and paper products shall not be cleaned.
 - (9) Conduct monitoring of each control device used to comply with 63.463 of this subpart as provided in 63.466.
- (c) That, pursuant to 40 CFR 63.463(e)(2), the Permittee shall conform to the following control equipment requirements:
- (1) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in paragraphs (e)(2)(i) through (e)(2)(~~vi~~)(~~vii~~) of this section.
 - (2) Pursuant to When using a reduced room draft the Permittee shall:
 - (i) ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning

machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR63.466(d).

- (ii) establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR63.466 (d).

~~(3) When using the freeboard refrigeration device, the owner or operator shall ensure that the chilled air blanket temperature (in F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.~~

(3) (4) When using the idling-mode cover, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iv)(A) and (e)(2)(iv)(B) of this section.

(4) (5) When using superheated vapor system, pursuant to 40 CFR 63.463(e)(2) (vi)(A), the owner or operator shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point.

(6) ~~When using the carbon adsorber, pursuant to 40 CFR 63.463(e)(2) (vii)(A) through (C), the owner or operator shall:~~

~~(A) Ensure that the concentration of organic solvent in the exhaust from this device does not exceed 100 parts per million of any halogenated HAP compound as measured using the procedure in 63.466(e). If the halogenated HAP solvent concentration in the carbon adsorber exhaust exceeds 100 parts per million, the owner or operator shall adjust the desorption schedule or replace the disposable canister, if not a regenerative system, so that the exhaust concentration of halogenated HAP solvent is brought below 100 parts per million.~~

~~(B) Ensure that the carbon adsorber bed is not bypassed during desorption.~~

~~(i) Ensure that the lip exhaust is located above the solvent cleaning machine cover so that the cover closes below the lip exhaust level.~~

~~(ii) If any of the requirements of paragraph 40 CFR 63.463(e)(2) are not met, the owner or operator shall determine whether an exceedance has occurred using the criteria in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.~~

(d) That, pursuant to 40 CFR 63.465(e) and 40 CFR 63.466(a)-(g), the Permittee shall conform to the following Monitoring Requirements:

- (1) An owner or operator of the source shall determine their potential to emit from all solvent cleaning operations, using the procedures described in paragraphs (e)(1) through (e)(3). A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility. Determine the potential to emit for each individual solvent cleaning machine using equation:

$$PTE_i = H_i \times W_i \times SAI_i,$$

where,

PTE_i = the potential to emit for solvent cleaning machine i (kilograms of solvent per year).

H_i = hours of operation for solvent cleaning machine i (hours per year),

H_i = 8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour). W_i = 1.95 kilograms per square meter per hour for batch vapor machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 40 CFR 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface.

Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

~~(2) For a freeboard refrigeration device used to comply with these standards, the owner or operator shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.~~

(2) (3) For a cover (downtime-mode, and/or idling-mode cover) used to comply with these standards, the owner or operator shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects on a monthly basis.

(3) (4) The owner or operator shall determine the hoist (parts handler) speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute). The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly. If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated.

(4) (5) If the owner or operator can demonstrate to the ERMD's satisfaction in the initial compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.

~~(6) (For the carbon adsorber used to comply with this subpart the owner or operator shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a colorimetric detector tube. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to the carbon adsorber. The exhaust concentration shall be determined using the procedure specified in 40 CFR 63.466(e)(1)-(3):~~

~~(A) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of solvent in air to an accuracy of 25 parts per million by volume.~~

~~(B) Use the colorimetric detector tube according to the manufacturer's instructions.~~

~~(G) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet or outlet.~~

- (5) ~~(7)~~ Pursuant to 40 CFR 63.466(g), the owner or operator of this source can use alternative monitoring procedures approved by the ERMD.
- (e) That, pursuant to 40 CFR 63.463(e)(4), the owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 63.468(h).
- (f) That the owner or operator of this batch vapor solvent Degreaser complying with the provisions of 40 CFR 63.463 shall submit to the IDEM, OAM, and ERMD an initial compliance report. This report shall be submitted to the IDEM, OAM, and ERMD no later than 150 days after startup. Pursuant to 40 CFR 63.468(d1)-(d6), this statement shall include the following information:
- (1) The name and address of the owner or operator.
 - (2) The address (i.e., physical location) of the solvent cleaning machine(s).
 - (3) A list of the control equipment used to achieve compliance for each solvent cleaning machine.
 - (4) For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date.
 - (5) The date and results of the weekly measurements of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in 40 CFR 63.466(e).
- (g) The owner or operator of this batch vapor Degreaser, complying with the provisions of 40 CFR 63.463, shall submit an annual report by February 1 of the year following the one for which the reporting is being made. Pursuant to 40 CFR 63.468(f), this report shall include the following information:
- (1) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 63.463(d)(10)."
 - (2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period. This estimate may be combined with the Annual Emission Statement.
- (h) Pursuant to 40 CFR 63.468(h), the owner or operator of this batch vapor Degreaser shall submit an exceedance report to the ERMD semiannually except when the ERMD determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an

exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h)(1)-(3) of this section.

An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions of this section are met:

- (1) The source has demonstrated a full year of compliance without an exceedance.
- (2) The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63 subpart A (General Provisions) and in this subpart.
- (3) The ERMD does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).

D.2 Open Top Vapor Degreaser Operation and Control [326 IAC 8-3-6(a) and (b)]

Pursuant to IAPCB Regulation 8-3-1 (2) (Organic solvent degreasing operations: applicability) and 326 IAC 8-3-6(a) and (b) (Open Top Vapor Degreaser Operation and Control Requirements),

- (a) the owner or operator of an open top vapor degreaser shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.
 - (2) Equip the degreaser with the following switches:
 - (A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (B) A spray safety switch which shuts off spray pump if the vapor level drops more than four (4) inches.
 - (3) Equip the degreaser with a permanent, conspicuous label which lists the opening requirements outlined in subsection (b).
 - (4) Equip the degreaser with **one of** the following control devices:
 - (A) A freeboard ratio of one seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).
 - (B) A refrigerated chiller.
 - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.

Company Name: Detrex Corporation
Location: Indiana
Permit Reviewer: Boris Gorlin

Page 8 of 8
CP-097-11791-00373
Pit ID-097-00373

First Administrative Amendment 097-14202-00373

- (D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle.
- (E) Other systems of demonstrated equivalent or better control as those outlined in clauses (A) through (D). Such systems shall be submitted to the U.S. EPA as a SIP revision.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages (attached) to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mr. Boris Gorlin at (317) 327-2280.

Sincerely,

Daniel B. Dovenbarger
Administrator

Attachments

cc: file
Matt Mosier, Air Compliance
Mindy Hahn, IDEM OAQ

B.G.

NEW SOURCE CONSTRUCTION PERMIT

**OFFICE OF AIR MANAGEMENT
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES
MANAGEMENT DIVISION**

**Detrex Corporation
2263 Distributors Drive
Indianapolis, IN 46241**

herein known as the Permittee, is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 097-11791-00373	
Issued by: Mona A. Salem Chief Operating Officer Department of Public Works	Issuance Date: 6/16/00
First Administrative Amendment to Construction Permit No.: CP 097-11791-00373 A 097-14202-00373	Pages affected: 3, 17 - 24
Issued by: Daniel B. Dovenbarger Administrator, ERMD	Issuance Date: April 5, 2001

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and City of Indianapolis Environmental Resources Management Division (ERMD), Air Quality Management. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary source, a hazardous waste container storage facility, specializing in the sale of various products, including cleaning fluids and related cleaning equipment, and the recovery recycling of spent solvents. These operations emissions are below significance levels and do not require a permit. The Permittee is proposing to construct and operate a contract parts cleaning system with a cross rod vapor degreaser.

Authorized Individual: Mr. Roy Richards, Facility Manager
Source Address: 2263 Distributors Drive, Indianapolis, Indiana 46241
Mailing Address: 2263 Distributors Drive, Indianapolis, Indiana 46241
Phone Number: 317-241-9379
SIC Code: 2869, 5051
County Location: Marion
County Status: Attainment for all criteria pollutants
Source Status: Major Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) cross rod batch vapor Degreaser (model 2DCR-550-1S-SPCC), Emission Unit #113, using superheated vapor, with air solvent interface 96 square feet, maximum capacity 7,000 pounds per hour, Stack ID S/V-1. Emissions will be controlled by a freeboard ratio of 1.0, a reduced room draft, and superheated vapor. A carbon adsorber, Emission Unit #115, Stack ID S/V-3, will also be added as additional control.
- (b) Solvent Still, Emission Unit #114, (model S-400-S), Stack ID SV-1.
- (c) TTO Tank with a carbon drum for water polishing prior to discharge of the water, Stack S/V-1.

The system will use Trichloroethylene (CAS number 79-01-6) as the cleaning solvent.
Planned system installation date - 2nd quarter of 2000.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22)(C))AA) - a single hazardous air

SECTION D

EMISSIONS UNIT OPERATION CONDITIONS

One (1) cross rod batch vapor Degreaser (model 2DCR-550-1S-SPCC), Emission Unit #113, using superheated vapor, with air solvent interface 96 square feet, maximum capacity 7,000 pounds per hour, Stack ID S/V-1. Emissions will be controlled by a freeboard ratio of 1.0, a reduced room draft, and superheated vapor. A carbon adsorber, Emission Unit #115, Stack ID S/V-3, will also be added as additional control.

Emission Limitations and Standards

D.1 Halogenated Solvent Cleaning Machine NESHAP [40 CFR Part 63, Subpart T], [326 IAC 20-6-1]

This facility is subject to 40 CFR Part 63, Subpart T, (Halogenated Solvent Cleaning Machine NESHAP), which is incorporated by reference as 326 IAC 20-6-1.

- (a) That pursuant to 40 CFR 63.463(a) & (b), the Permittee shall conform to the following design requirements:
 - (1) The Degreaser shall have a freeboard ratio of one (1.0).
 - (2) The Degreaser shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
 - (3) The Degreaser shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
 - (4) The Degreaser shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the Degreaser rises above the height of the primary condenser.
 - (5) The Degreaser shall have a primary condenser.
 - (6) The Degreaser shall be designed and operated to route all collected solvent vapors through a properly operated and maintained carbon adsorber that meets the requirements of 40 CFR 63.463(e)(2)(vii).
 - (7) The parts baskets or the parts being cleaned in the Degreaser shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
- (b) That, pursuant to 40 CFR 63.463 (d), the following work and operational practice requirements for the degreasing operations are applicable:
 - (1) Any spraying operations shall be done within the vapor zone or within a section of the Degreaser that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
 - (2) Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from the Degreaser unless an equally effective approach has been approved by the ERMD.

- (3) Parts baskets or parts shall not be removed from the Degreaser until dripping has stopped.
 - (2) During startup of the Degreaser, the primary condenser shall be turned on before the sump heater.
 - (3) During shutdown of the Degreaser, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
 - (4) When solvent is added or drained from the Degreaser, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
 - (5) The Degreaser and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the ERMD's satisfaction to achieve the same or better results as those recommended by the manufacturer.
 - (6) Each operator of the Degreaser shall receive training and will pass a solvent cleaning procedures test in accordance with 40 CFR 63.463(d)(10).
 - (7) Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
 - (8) Sponges, fabric, wood, and paper products shall not be cleaned.
 - (9) Conduct monitoring of each control device used to comply with 63.463 of this subpart as provided in 63.466.
- (c) That, pursuant to 40 CFR 63.463(e)(2), the Permittee shall conform to the following control equipment requirements:
- (1) Determine during each monitoring period whether each control device used to comply with these standards meets the requirements specified in paragraphs (e)(2)(i) through (e)(2)(vi) of this section.
 - (2) Pursuant to When using a reduced room draft the Permittee shall:
 - (i) ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at anytime as measured using the procedures in 40 CFR 63.466(d).
 - (ii) establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR 63.466 (d).

- (3) When using the idling-mode cover, the owner or operator shall comply with the requirements specified in paragraphs (e)(2)(iv)(A) and (e)(2)(iv)(B) of this section.
 - (4) When using superheated vapor system, pursuant to 40 CFR 63.463(e)(2) (vi)(A), the owner or operator shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10°F above the solvent's boiling point.
- (d) That, pursuant to 40 CFR 63.465(e) and 40 CFR 63.466(a)-(g), the Permittee shall conform to the following Monitoring Requirements:

- (1) An owner or operator of the source shall determine their potential to emit from all solvent cleaning operations, using the procedures described in paragraphs (e)(1) through (e)(3). A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility:

Determine the potential to emit for each individual solvent cleaning machine using equation:

$$PTE_i = H_i \times W_i \times SAI_i,$$

where,

PTE_i = the potential to emit for solvent cleaning machine i (kilograms of solvent per year).

H_i = hours of operation for solvent cleaning machine i (hours per year),

H_i = 8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour). W_i = 1.95 kilograms per square meter per hour for batch vapor machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 40 CFR 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface.

Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

- (2) For a cover (downtime-mode, and/or idling-mode cover) used to comply with these standards, the owner or operator shall conduct a visual inspection to determine if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes, and other defects on a monthly basis.
- (3) The owner or operator shall determine the hoist (parts handler) speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute). The monitoring shall be conducted monthly. If after the first year, no exceedances of the hoist speed are measured, the owner or operator may begin monitoring the hoist speed quarterly. If an exceedance of the hoist speed occurs during quarterly monitoring, the monitoring frequency returns to monthly until another year of compliance without an exceedance is demonstrated.

- (4) If the owner or operator can demonstrate to the ERMD's satisfaction in the initial

compliance report that the hoist cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.

- (5) Pursuant to 40 CFR 63.466(g), the owner or operator of this source can use alternative monitoring procedures approved by the ERMD.
- (e) That, pursuant to 40 CFR 63.463(e)(4), the owner or operator shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 63.468(h).
- (f) That the owner or operator of this batch vapor solvent Degreaser complying with the provisions of 40 CFR 63.463 shall submit to the IDEM, OAM, and ERMD an initial compliance report. This report shall be submitted to the IDEM, OAM, and ERMD no later than 150 days after startup. Pursuant to 40 CFR 63.468(d1)-(d6), this statement shall include the following information:
 - (1) The name and address of the owner or operator.
 - (2) The address (i.e., physical location) of the solvent cleaning machine(s).
 - (3) A list of the control equipment used to achieve compliance for each solvent cleaning machine.
 - (4) For each piece of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date.
 - (5) The date and results of the weekly measurements of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in 40 CFR 63.466(e).
- (g) The owner or operator of this batch vapor Degreaser, complying with the provisions of 40 CFR 63.463, shall submit an annual report by February 1 of the year following the one for which the reporting is being made. Pursuant to 40 CFR 63.468(f), this report shall include the following information:
 - (1) A signed statement from the facility owner or his designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 63.463(d)(10)."
 - (2) An estimate of solvent consumption for each solvent cleaning machine during the reporting period. This estimate may be combined with the Annual Emission Statement.
- (h) Pursuant to 40 CFR 63.468(h), the owner or operator of this batch vapor Degreaser shall submit an exceedance report to the ERMD semiannually except when the ERMD determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the

source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency is approved.

Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h)(1)-(3) of this section.

An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions of this section are met:

- (1) The source has demonstrated a full year of compliance without an exceedance.
- (2) The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63 subpart A (General Provisions) and in this subpart.
- (3) The ERMD does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).

D.2 Open Top Vapor Degreaser Operation and Control [326 IAC 8-3-6(a) and (b)]

Pursuant to IAPCB Regulation 8-3-1 (2) (Organic solvent degreasing operations: applicability) and 326 IAC 8-3-6(a) and (b) (Open Top Vapor Degreaser Operation and Control Requirements),

(a) the owner or operator of an open top vapor degreaser shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover that can be opened and closed easily without disturbing the vapor zone.
- (2) Equip the degreaser with the following switches:
 - (A) A condenser flow switch and thermostat which shuts off sump heat if condenser coolant stops circulating or becomes too warm.
 - (B) A spray safety switch which shuts off spray pump if the vapor level drops more than four (4) inches.
- (3) Equip the degreaser with a permanent, conspicuous label which lists the opening requirements outlined in subsection (b).
- (4) Equip the degreaser with one of the following control devices:
 - (A) A freeboard ratio of one seventy-five hundredths (0.75) or greater and a powered cover if the degreaser opening is greater than one (1) square meter (ten and eight-tenths (10.8) square feet).
 - (B) A refrigerated chiller.
 - (C) An enclosed design in which the cover opens only when the article is actually entering or exiting the degreaser.
 - (D) A carbon adsorption system with ventilation which, with the cover open, achieves a ventilation rate of greater than or equal to fifteen (15) cubic meters per minute per square meter (fifty (50) cubic feet per minute per square foot) of air to vapor interface area and an average of less than

twenty-five (25) parts per million of solvent is exhausted over one (1) complete adsorption cycle.

- (E) Other systems of demonstrated equivalent or better control as those outlined in clauses (A) through (D). Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) the owner or operator of an open top vapor degreaser shall ensure that the following operating requirements are met:

- (1) Keep the cover closed at all times except when processing workloads through the degreaser.
- (2) Minimize solvent carry out emissions by:
 - (A) Racking articles to allow complete drainage;
 - (B) Moving articles in and out of the degreaser at less than three and three-tenths (3.3) meters per minute (eleven (11) feet per minute);
 - (C) Degreasing the workload in the vapor zone at least thirty (30) seconds or until condensation ceases;
 - (D) Tipping out any pools of solvent on the cleaned articles before removal; and
 - (E) Allowing articles to dry within the degreaser for at least fifteen (15) seconds or until visually dry.
- (3) Prohibit the entrance into the degreaser of porous or absorbent materials such as, but not limited to, cloth, leather, wood, or rope.
- (4) Prohibit occupation of more than one-half ($\frac{1}{2}$) of the degreaser's open top area with the workload.
- (5) Prohibit the loading of the degreaser to the point where the vapor level would drop more than ten (10) centimeters (four (4) inches) when the workload is removed.
- (6) Prohibit solvent spraying above the vapor level.
- (7) Repair solvent leaks immediately or shut down the degreaser if leaks cannot be repaired immediately.
- (8) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

- (9) Prohibit the exhaust ventilation rate from exceeding twenty (20) cubic meters per minute per square meter (sixty-five (65) cubic feet per minute per square foot) of degreaser open area unless a greater ventilation rate is necessary to meet Occupational Safety and Health Administration requirements.

- (10) Prohibit the use of workplace fans near the degreaser opening.
- (11) Prohibit visually detectable water in the solvent exiting the water separator.

D.3 Recordkeeping Requirements [40 CFR 63.467(a)(1)-(2), (b)(1)-(4)], [326 IAC 20-6-1]

That, pursuant to 40 CFR 63.467(a)(1)-(2) and 40 CFR 63.467(b)(1)-(4), the Permittee shall maintain, in written or electronic form, records of the following information specified below.

(a) for the lifetime of the Degreaser:

- (1) Owner's manuals, or if not available, written maintenance and operating procedures, for the Degreaser and control equipment.
- (2) Records of the halogenated HAP solvent content for each solvent used in the Degreaser.
- (3) The date of installation of the Degreaser and all of its control devices.

(b) for a period of 5 years:

- (1) Each owner or operator of the Degreaser, complying with 63.463, shall maintain records specified in paragraphs (b)(1) through (b)(4) of this section either in electronic or written form for a period of 5 years.
- (2) The results of control device monitoring required under 63.466.
- (3) Information on the actions taken to comply with 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
- (4) Estimates of annual solvent consumption.
- (5) Records of the date and results of the weekly measurement of the halogenated HAP solvent concentration in the carbon adsorber exhaust required in 40 CFR 63.466(e).

D.4 Reporting Requirements [326 IAC 2-1.1-11]

A summary of the information to document compliance with Operation Condition C.9 shall be submitted to the IDEM, OAM, and ERMD addresses listed in Operation Condition C.17 of this permit.

- (a) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:

Company Name: Detrex Corporation

Location: Indiana

Permit Reviewer: Boris Gorlin

First Administrative Amendment 097-14202-00373

Page 24 of 27

CP-097-11791-00373

Pit ID-097-00373

- (i) Delivered by U.S. mail and postmarked on or before the date it is due; or
- (ii) Delivered by any other method if it is received and stamped by IDEM, OAM and ERMD on or before the date it is due.

- (b) All instances of deviations from any requirements of this permit must be clearly identified in such reports.
- (c) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.
- (d) The first report shall cover the period commencing with the postmarked submission date of the Affidavit of Construction.